DOCUMENT RESUME

ED 273 943 CS 008 566

AUTHOR Whitmer, Jean E.
TITLE Does Writing Modeled after Children's Picture Books Improve Reading Comprehension?
PUB DATE Oct 86
NOTE 11p.; Paper presented at the Annual Reading Conference of the University of Northern Colorado (19th, Greeley, CO, October 17, 1986).
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Comparative Analysis; Grade 4; Grade 5; Intermediate Grades; *Models; *Picture Books; Pretests Posttests; Prewriting; Reading Achievement; Reading Aloud to Others; *Reading Comprehension; *Reading Improvement; *Reading Research; *Reading Writing Relationship; Remedial Reading; Teaching Methods; Word Processing; Writing Exercises; Writing Processes
IDENTIFIERS Education Consolidation Improvement Act Chapter 1

ABSTRACT

A study examined whether writing modeled from children's picture books would improve reading comprehension of fourth and fifth graders as much as traditional skills instruction. Subjects, 69 children reading at least one year below grade level from six Chapter 1 Colorado schools, were pretested for reading comprehension levels. Subjects were then randomly assigned to one of three ten-week treatment groups using one of the following methods: (1) writing (without word processors) modeled after children's picture books that were read aloud by the Chapter 1 teacher and followed by oral language prewriting activities; (2) writing modeled after children's picture books that were read aloud and followed by oral language activities and revision and rewriting on microcomputer word processors; and (3) using a sequenced skills series instructional program, "Pegasus Pace," in current use by Chapter 1 teachers. Comparison of posttest and pretest scores indicated that although writing modeled after children's picture books resulted in significant comprehension gains compared to the skills control group, the addition of word processors to the writing method resulted in a significant loss of comprehension for that treatment group. Supporting the notion that writing improves reading ability, the results suggest that teachers need to provide children with many regular writing activities, while limiting the use of commercial programs and worksheets. (Tables of data and a sample lesson plan from the treatment groups are included.) (HTH)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED273943

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it.

Minor changes have been made to improve reproduction quality.

Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

DOES WRITING MODELED AFTER CHILDREN'S PICTURE BOOKS IMPROVE READING COMPREHENSION?

by

Dr. Jean E. Whitmer

Director of Reading Program

University of Southern Colorado

Pueblo, Colorado

Summary Statement: This is a description of a 1985 study in six Pueblo, Colorado, District 60 Chapter 1 schools to determinine whether or not writing, with and without word processors, will improve reading comprehension scores of remedial fourth and fifth grade students as much as a traditional skills program.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Jean E. Whitmer

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

BEST COPY AVAILABLE

CS 008 566

DOES WRITING MODELED AFTER CHILDREN'S PICTURE BOOKS IMPROVE READING COMPREHENSION?

Does writing modeled from children's picture books improve reading comprehension as much as traditional skills' instruction? I attempted to answer this question about fourth and fifth grade remedial readers from six Chapter 1 schools in Pueblo, Colorado, School District 60, during the Fall semester of 1985. A total of sixty-nine children who read at least one year below grade level participated in the study. Reading comprehension score means on the pretest were compared to the posttest for gain or loss on normal curve equivalents and grade equivalents with the SRA Survey of Basic Skills, Form P, Levels 23 and 34, after experimental groups had had ten weeks of three thirty minute writing experiences, using one of the following methods:

Method A: Writing modeled after children's picture books which were read to the children by the Chapter 1 teacher and followed by oral language prewriting activities.

Method B: Writing modeled after children's picture books which were read to the children by the Chapter 1 teacher and followed by oral language activities. Revision and rewriting were done with microcomputer word processors.

Method C: A sequenced skills series instructional program, Pegasus Pace, in current use by Chapter 1 teachers.

REVIEW OF LITERATURE

Until recently, reading and writing were assummed to be related, but separate communication skills. However, many researchers are now pointing out that not only do children learn to write by reading, but they also learn to read by writing. Dolores Durkin (1966), Carol Chomsky (1971), and Marie Clay (1977) were among the first to point out that writing may actually be easier for children than reading, and may be developed earlier. Meaning comes from within the child in writing, while in reading the child must penetrate the author's language and meaning.

Donald Graves and Donald Murray (1980), and others in the New Hampshire Writing Project found that writing improves reading ability, and reading improves writing ability. They noted that taking time from traditional skills instruction was not detrimental, but that reading test scores tended to improve when large amounts of time were taken from formal reading programs and devoted to writing.

DeFord (1981) found that first graders taught by integrated reading/writing approaches progressed more in reading ability than those who were taught with a subskills approach. Boutwell (1983) observed a third grade girl who learned basic skills as she switched roles from writer to reader and reader to writer. Ruth Hubbard (1985) also described case study reports of successful first graders who substituted "write and tell" integrated language experiences for isolated skills of reading and writing.

Oehlkers (1977) found that writing of first graders improved both word recognition and comprehension abilities. Sandra Stotsky (1983), in her summary of a review of literature on the relationships of reading and writing in elementary classrooms, noted that in those studies which used writing to improve reading comprehension, there were significant gains.

That writing improves comprehension of remedial readers is supported by Marie Clay (1977), who found that writing helps the poor reader to build sounds into words, words into phrases, and phrases into sentences. Dobson (1985) had unusual success with non-reading first graders. At midterm these remedial non-achieving children were involved in a writing project in which they wrote for thirty minutes a day and read their stories aloud. Although these children had made no apparent progress during the first five months of school, at the end of the year, the writing group was more advanced than their classmates in writing, vocabulary, and reading ability.

Studies have also shown that children can successfully use the word processor to improve their writing. Newman, (1984) found that the word processor allows the writer to manipulate text more quickly and flexibly, which encourages experimentation with language and longer sentences. Dudley-Marling (1985) observed that many children are reluctant to write because copying and editing are tedious tasks. Word processing makes editing easy, since text can be corrected, inserted, deleted, or moved about with the touch of a key.

Rosengrant (1985) used word processors with twelve learning disabled children from ages six to ten. None of them could read above the first grade level, and several did not know the alphabet. Rosengranat set up a word processing program with a built-in speech synthesizer. When children typed in text, it could be read back to them, enabling them to edit their stories. All of these children made gains of at least one year in reading and writing achievement. They also wrote longer sentences and made better word choices.

Wheeler (1985) found that word processors can facilitate not only mechanics of writing, but also the process as a whole, since the technology and writing reinforce one another. Wheeler and The

California Writing Project both cautioned that students be given keyboard instruction before using word processors and that there be a sufficient number of computers to meet student needs.

METHOD

Six Chapter 1 elementary classes were randomly assigned, within availability limitations, to experimental and control groups by School District 60 administrators. Children whose pretest grade equivalents were 3.1 or lower for fourth graders or 4.1 or lower for fifth graders qualified for the study. Of the sixty-nine remedial readers who took both the pretest and posttest, twenty participated in Method A, writing without word processors; thirty participated in Method B, writing with word processors; and nineteen participated in Method C, the skills' group.

The design compared mean pretest and posttest score gains or losses in reading comprehension for the three groups, using standard deviations and t tests to determine the probability of reoccurence of results.

RESULTS

The null hypothesis that the gain or loss between Groups A and C was equal was not upheld. Using t test differences between means of normal curve equivalents resulted in t values of $t = 3.23$ ($p = .0027$) which indicated that there was a significant difference between the writing without word processors group and the control group. Likewise, t test scores of grade equivalent means between Groups A and C were $t = 3.10$ ($p = .0039$), showing the differences between means of writing and skill groups to be significant in favor of the writing group.

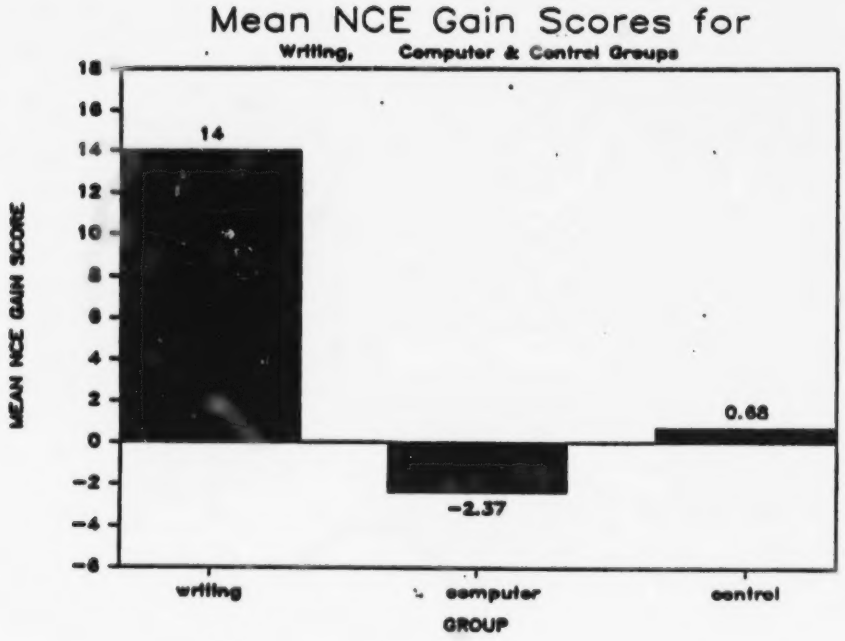
However, differences were also found between writing Group A, writing without word processors, and Group B, who used word processors. Significant differences between means in comprehension scores as measured by the t test were $t = 4.21$ ($p = .0002$) on normal curve equivalents and $t = 3.31$ ($p = .0022$) in grade equivalents, favoring Group A.

Although writing modeled after children's picture books resulted in significant comprehension gains compared to the skills' control group, the addition of the word processor to the writing method resulted in a significant loss of comprehension for Group B compared to Group A.

The null hypothesis that the groups were equal was not rejected between Groups B and C. T test scores between means of the normal curve equivalencies resulted in t values of 0.90 ($p = 0.37$), indicating no significant differences between Group B, writing with word processors and Group C, skills' instruction. T test results of grade equivalents

for these two groups were $t = 0.21$ ($p = 0.84$), which indicated no significant differences between Group B and Group C.

Results of the study are indicated in figure 1.



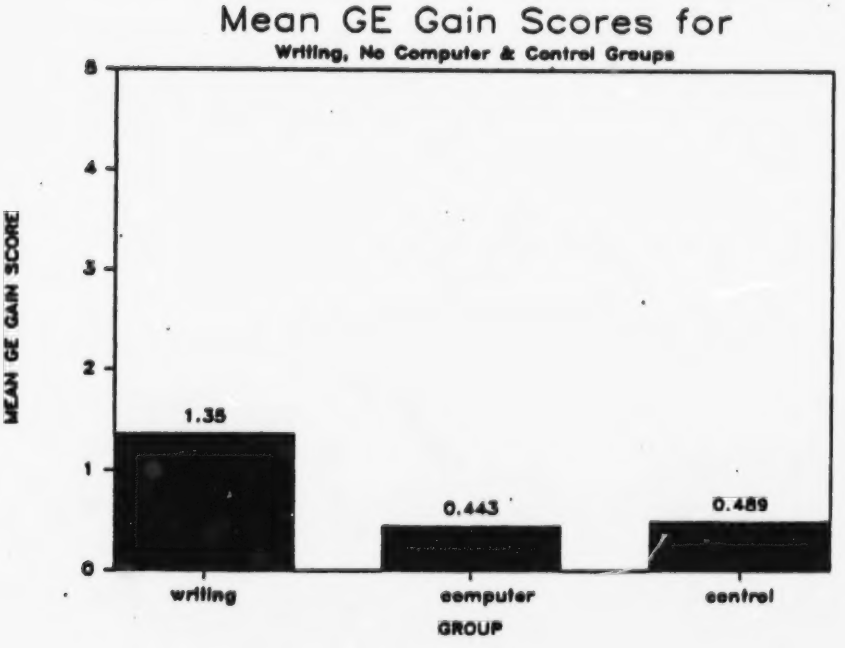


Figure 1.

BEST COPY AVAILABLE

The most obvious limitation of the study was the brevity of thirty minute time periods to read and discuss the stories and provide time for writing. Time pressures, lack of a sufficient number of computers, and lack of children's previous knowledge of the keyboard were cited as probable causes for stress and frustration by Group B teachers who used the computer. Also, random selection of the six Chapter 1 schools was limited to curriculum in current use and to willingness of Chapter I teachers to participate in the study.

Further studies are needed to explore the effect of word processors in teaching reading and writing, given sufficient time periods, keyboard instruction, and number of computers per student.

SUMMARY AND CONCLUSION

The results of this study support those of many researchers who have found that writing is beneficial in improving reading ability. On the strength of these findings and suggestions of the Report of the Commission on Reading, teachers need to provide children with many regular writing opportunities, while limiting the use of commercial programs and worksheets.

EXAMPLE LESSON PLAN

Pattern Book 1, Fortunately and Unfortunately
by Remy Charlip

Objectives:

Students participating in experimental groups will be able to:

1. Listen to a repeatable pattern in a picture book.
2. Use the same pattern in writing a short story of their own in sequential order.
3. Write a second draft after peer and teacher editing. (Group A)
4. Use the word processor in rewriting a pattern story after peer and teacher editing. (Group B)

Organization (Suggested):

Day 1--Procedures 1, 2, 3
Day 2--Procedure 5
Day 3--Procedure 6

Procedures:

1. Read the story, directing students to listen for the fortunate and unfortunate things that happened to Ned.

2. Pause before the words, fortunately and unfortunately, asking children to read these words with you.

3. Brainstorm, discuss, and categorize fortunate and unfortunate happenings, recording them on board or overhead.

4. Use prepared pattern, having children fill in fortunate and unfortunate happenings in a logical sequence. (See sample handout).

   Example: Fortunately, Harry received a new ten speed bicycle for his birthday. Unfortunately, he didn't know how to ride it.

5. Illustrate, revise, and copy. Use peer and teacher editing. Group B copy and revise with word processor.

6. Share stories and illustrations by having children read and then retell them.

REFERENCES

Bradley, Virginia, "Improving Student' Writing with Microcumputers" Language Arts, 59, October, 1982: 732-743.

Boutwell, Marilyn A. "Reading and Writing Process: A Reciprocal Agreement", Language Arts, 60, September, 1983: 723-730.

Cafone, Harold and Gerry Palmer. "Reading and Writing: Tightening the Connection," Early Years, May, 1985.

Calkins, Lucy McCormick. "Make the Reading-Writing Connection," Learning, September, 1983, pp. 82-86.

Chomsky, Carol. "Write First, Read Later," Childhood Education, Vol 47, March, 1971.

Clay, Marie. Write Now, Read Later, IRA, 1977.

Dobson, Lee N. "Learn to Read by Writing", Teaching Exceptional Children, Fall, 1985, pp. 30-36.

De Ford, Diane E. "Literacy: Reading, Writing, and Other Essentials", Language Arts, 58, September, 1981: 652-659.

Dudley-Marling, Curtis C. "Microcumputers: Reading and Writing: Alternatives to Drill and Practice", The Reading Teacher, 38, January, 1985: 388-391.

Durkin, Delores. "What Classroom Questions Reveal About Reading Comprehension", Reading Research Quarterly, 14, 1979: 481-553.

Graves, Donald. Writing: Teachers and Children at Work, Heinnemann Educational Books, Exeter, N.H., 1983.

Hansen, Jane/Thomas Newkirk/ Donald Graves. Breaking Ground: Teachers Relate Reading and Writing in the Elementary School, Heinemann, 1985.

Hennings, Dorothy. "A Writing Approach to Reading Comprehension," Language Arts, 59, January, 1982: 8-18.

Honig, Bill. Handbook for Planning an Effective Writing Program, California State Department of Education, 1982.

Hubbard, Ruth. "How Kids Can Bring Their Stories to Life and Improve Their Reading Skills," Learning, April/ May, 1985, pp. 50-52.

Newkirk, Thomas, "The Hedgehog or the Fox: The Dilemma of Writing Development", Language Arts, Vol. 62, October, 1985, pp. 593-604.

Newman, Judith. "Language Learning and Computers," Languange Arts, 61, September, 1984: 494-497.

Oehlkers, W. "The Contributions of Creative Writing to Reading Achievement in the Language Experience Approach", Doctoral dissertation, University of Iowa, 1971. In Disertation Abstracts Internatio;nal 32: 1971: 6689 A.

Rosegrant, Teresa. "Using the Microcomputer as a Tool for Learning to Read and Write," Journal of Learning Disabilities, 18, February, 1985.

Smith, Nancy J. "The Word Processing Approach to Language Experience", The Reading Teacher, 38, February, 1985: 556-562.

Stotsky, Sandra, "Research on Reading/Writing Relationships," Language Arts 60, May, 1983: 627-644.

Wheeler, Fay. "Can the Word Processor Help the Writing Process?" Learning, March 1985.

Wolff, Franz E, 'Word Processing is a Tool for Comprehension," The Reading Teacher, 8, April, 1984.

Woodfin, M. "Correlations among Certain Factors and the Written Expression of Third Grade Children. Educational and Psychological Measurement, 28 (1981)